

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: MO-0000809

Owner: Lone Star Industries, Inc. d.b.a. Buzzi Unicem USA
Address: P.O. Box 520, Cape Girardeau, MO 63702

Continuing Authority: Same as above
Address: Same as above

Facility Name: Lone Star Industries, Inc. d.b.a. Buzzi Unicem USA
Address: 2524 S. Sprigg Street, Cape Girardeau, MO 63703

Legal Description: Sec. 7, 18 and 19, T30N, R14E, & Sec. 13, T30N, R13E, Cape Girardeau County

Receiving Stream: #001-#003 Mississippi River (P); #004-Cape LaCroix Creek (P)
First Classified Stream and ID: #001-#003 Mississippi River (P) (01707); #004-Cape LaCroix Creek (P)
USGS Basin & Sub-watershed No.: (07140105-150003)

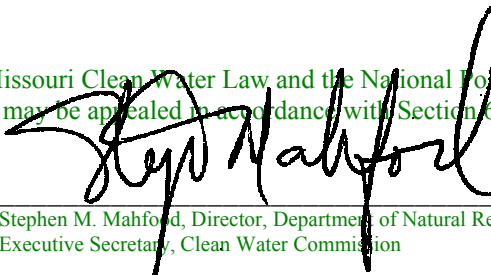
is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

December 23, 2004
Effective Date


Stephen M. Mahford, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

December 22, 2009
Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

LEGAL DESCRIPTION

Outfall #001 – Center of Sec. 19, T30N, R14E, Cape Girardeau County

Outfall #002 – NE ¼, Sec. 18, T30N, R14E, Cape Girardeau County

Outfall #003 – SW ¼, NE ¼, SW ¼, Sec. 18, T30N, R14E, Cape Girardeau County

Outfall #004 – SW ¼, SE ¼, Sec. 7, T30N, R14E, Cape Girardeau County

Outfall #001 – Cement Plant/Quarry SIC #3241

Stormwater runoff, quarry dewatering/ Non contact cooling water/ Equipment wash water

Effluent from Outfall #003.

Design flow is 1.36 MGD.

Actual flow is rainfall dependent.

Outfall #002 – Stormwater Runoff SIC #3241/ Waste dust wetting

Stormwater Runoff from gypsum and silica stock piles.

Flow dependent upon precipitation.

Outfall #003 – Domestic Sanitary Flows – SIC #4952

Extended Aeration/Sludge disposal is by contract hauler.

Design population equivalent is 120.

Actual flow is 2,700 gallons per day. Design flow is 5,000 gallons per day.

Design Sludge production is 2.52 dry tons/year.

Outfall #004 – Emergency pit dewatering/stormwater runoff

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 6	
PERMIT NUMBER MO-0000809						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> (Note 1)						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Temperature	°F	90		90	once/quarter**	grab
Total Suspended Solids	mg/L	50		50	once/quarter**	grab
pH – Units	SU	****		****	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
<u>Outfall #002</u> (Note 2)						
Flow	MGD	*			once/quarter**	24 hr. estimate
Temperature	°F	90°		90°	once/quarter**	grab
Total Suspended Solids	mg/L	50		50	once/quarter**	grab
pH – Units	SU	****		****	once/quarter**	grab
<u>Outfall #003</u> (Note 3)						
Flow	MGD	*		*	once/year in August	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	once/year in August	grab
Total Suspended Solids	mg/L		45	30	once/year in August	grab
pH – Units	SU	****		****	once/year in August	grab
<u>Outfall #004</u>						
Flow	MGD	*		*	once/discharge/day	24 hr. estimate
Total Suspended Solids	mg/L	50		50	once/discharge/day	grab
pH – Units	SU	****		****	once/discharge/day	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>April 28, 2005</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Sample once per quarter in the months of February, May, August, and November.
- *** Reserved.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1- The 300-acre borrow pit which ultimately receives the wastewater flow from Outfall#001 and Outfall #003 discharges to Dutch Town ditch which discharges to the Mississippi River. Wastewater is to be sampled at the inlet structure to the borrow pit. If the inlet structure and borrow pit are flooded by the Mississippi during the quarter, report "Flooded" and the months during which flooding conditions existed.

Note 2- Sampling shall be done once per quarter during any precipitation event of the quarter that causes stormwater runoff from the preliminary gypsum and silica storage area. If the area of stockpiling is flooded by the Mississippi River during the quarter, report "FLOODED" and the month or months during which flooding conditions existed.

Note 3- Sampling for Outfall #003 will be from the effluent of the extended aeration plant.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. This permit may be reopened and modified or alternatively revoked and reissued, to incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to ensure compliance with Missouri's Water Quality Standards.
5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 ug/L);
 - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
6. Report as no-discharge when a discharge does not occur during the report period.
 7. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;

C. SPECIAL CONDITIONS (continued)

7. General Criteria. (continued)
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
8. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, Permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon cleanout and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.